



Executive Session - Kickoff

Jim Strait

Director's Progress Review of the Short Baseline Neutrino Program

15-Dec-2015

In Case of Emergency

- **Emergency Calls:**
 - Call 3131 from a lab phone
 - Call (630) 840-3131 from a cell phone
- **Fire:**
 - Exit Wilson Hall south stairways to ground floor
 - Follow building residents to assembly area
- **Tornado/Severe Weather:**
 - Exit Wilson Hall south stairways to basement refuge area (behind auditorium)
 - Stay in refuge area until “all clear” is announced

Agenda for Exec Session

- Introductions
- SBN Background
- Charge to Reviewers
- Assignments/Write-ups
- Agenda
- Discussion

Introductions

- Please introduce yourself:
 - Your name
 - Your home institution or company and role
 - The area you are reviewing or role at this review

Background - Program not a Project

What the SBN Program **IS**:

- A physics program: search for sterile neutrinos
- A staged campaign to install and operate three LArTPC detectors
 - Today's review covers two of the three: ICARUS and SBND
- A component of detector R&D headed toward DUNE
- Mixture of in-kind contributions from several European and American organizations

What the SBN Program **IS NOT**:

- A DOE 413 Project

Charge Scope

- This review should cover the following aspects of the program:
 - Design, construction, and installation of the SBND detector;
 - Refurbishment and installation of the ICARUS detector including design and construction of any new detector subsystems such as the Cosmic Ray Tagger;
 - Design, construction, and installation of the necessary support infrastructure such as buildings, cryogenic systems, overburden and DAQ;
 - Progress toward a conceptual design for upgrades to the Booster Neutrino Beam (BNB).

Comments on the Charge Scope

- The SBN Program is supported from multiple funding sources: DOE, CERN, INFN, NSF, SNSF, STFC
- The review addresses technical, schedule and management issues for all aspects of the (two-detector) program
- The review addresses cost issues only for the DOE-funded part.
 - DOE funds come in several flavors: GPP, Detector R&D, Neutrino Division operating funds
 - Cost contingency is not explicitly included. The handling of contingency will be discussed in the management, cost and schedule breakout this afternoon.
- Expect detailed schedules for the DOE-funded activities and milestone schedules for the non-DOE deliverables
- This is a Fermilab Director's Review, but other stakeholders have their own concerns that they hope will be addressed in this review.

Design and Scope Charge Questions

Each **Technical** Subcommittee (Facilities and Infrastructure, Detectors) will respond to the following questions in their section of the report:

- Have performance requirements been defined that meet the goals of the SBN program?
- Have independent design reviews been conducted? Based on the design reviews, are the designs sound and likely to meet the performance requirements?
- Do the designs capture the entire scope and are they adequately defined?
- Have the partnering agencies/organizations (e.g. CERN, DOE, INFN, NSF, SNSF, and STFC) identified and agreed to their respective scope?

Cost and Schedule Charge Questions

The **Cost and Schedule** Subcommittee will respond to the following questions in their section of the report:

- Are the DOE cost and schedule estimates credible and realistic?
- Is the proposed DOE spending profile consistent with the projected available budget?
- Has adequate scope and schedule contingency been identified?

Management Charge Questions

The **Management** Subcommittee will respond to the following questions in their section of the report:

- Have sufficient management plan documents been developed?
- Are coordinated management teams in place?
- Is there a credible plan for interface control?
- Are the projected resources sufficient to complete design, construction, and installation and are these resources likely to be available when needed?
- Are critical procurements sufficiently understood and coordinated across the organizations involved?
- Is ES&H being appropriately addressed? Are the required environmental approvals, permits, and safety approvals on track to meet the schedule?

Reviewer Assignments

Chairperson

Jim Strait, FNAL

Project Management

Dan Green, FNAL Emeritus*

Jim Strait, FNAL

Cost and Schedule

Rich Marcum, FNAL*

Bill Freeman, FNAL

ESH&O

David Mertz, FNAL*

*Lead

Facilities and Infrastructure

Jim Grudzinski, ANL*

Mark Messier, IN University

Brian Rebel, FNAL

Bill Soyars, FNAL

Detectors

Mayly Sanchez, Iowa State*

Bruce Baller, FNAL

Melynda Brooks, LANL

Gary Drake, ANL

Luca Grandi, Univ of Chicago

Booster Neutrino Beam Upgrade

Chris Polly, FNAL

Reporting Structure

- Each subcommittee will answer their respective charge questions and author findings, comments, and recommendations.
- The draft report (in MS Word) will be used for the closeout presentation
- Answers to the questions and any recommendations should be presented at the closeout with SBN's and Fermilab's management.
 - It is good practice to fact check the report with the project team prior to the closeout.

Report Terminology

Findings	Findings are statements of fact that summarize noteworthy information presented during the review.
Comments	<p>Comments are judgment statements about the facts presented during the review. The reviewers' comments are based on their experiences and expertise.</p> <p>The comments are to be evaluated by the project team and actions taken as deemed appropriate.</p>
Recommendations	<p>Recommendations are statements of actions that should be addressed by the project team.</p> <p>A response to the recommendation is expected and that the actions taken would be reported on during future reviews.</p>

Committee Deliverables and Deadlines

- Report template (Review Closeout Presentation Format) is posted on Director's Review Webpage

http://www.fnal.gov/directorate/OPMO/Projects/SBN/DirRev/2015/20151215/CLOSEOUT_SBN_DPR_2015.docx

- There is to be one consolidated write-up for each subcommittee including charge questions.
- Write-ups are to be sent to Lisa Temple (ltemple@fnal.gov) by 9:30 AM Thursday so Closeout Dry Run can start by 10:00 AM.
- A final report will be issued within 1 week after the closeout.

Today's Agenda Overview

8:30am-1:40pm today (lunch ~noon): Plenaries in One West

1:45pm-5:00pm today: Breakouts in various

5:00pm-5:30pm today: Subcommittee executive session in
Breakout Rooms

5:30pm-6:30pm today: Full committee executive session in
Comitium

Wednesday Agenda Overview

- 8:00am-12:30pm – Breakouts
- 1:30-2:30pm – Answers to homework questions (if required)
- 2:30-3:30pm – Subcommittee discussion/writing
- 3:45-5:30pm – Full Committee discussion, writing, dry run

Thursday Agenda Overview

- 8am-10am – Final writing
- 10am-1pm – Final Dry Run
- 1pm – Closeout

Questions?